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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/587,483 | 07/27/2006 | Mamoru Shoji | 2006_1098A | 5169 |
| 53349 7590 07/25/2008 WENDEROTH, LIND & PONACK L.L.P. 2033 K. STREET, NW SUITE 800 WASHINGTON, DC 20006 | | | | |
| EXAMINER | | | | |
| AGUSTIN, PETER VINCENT | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2627 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/587,483

Applicant(s)

SHOJI ET AL.

Examiner

Peter Agustín

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date ____

DETAILED ACTION

1. This application is a national stage entry (371) of PCT/JP04/18345, filed December 9, 2004.
2. Claims 1-9 are currently pending.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

4. Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 & 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Minechika et al. (EP 1355300 A1).

In regard to claim 1, Minechika et al. disclose a servo position adjustment method for recording to an information recording medium (note title: “disk unit”), in which a plurality of tracks are formed concentrically or spirally, and the recording side of the tracks is irradiated with an optical beam to record user data in marks and the spaces between marks (these are well known properties of optical recording media), comprising: a first servo position adjustment step (paragraph 0040: “optimal defocus value DFte”); a recording step of recording a predetermined signal (paragraph 0043: “test writing”) after first servo position adjustment; and a second servo position adjustment step of performing second servo position adjustment by reproducing the track where the predetermined signal was recorded (paragraph 0043: “a writing signal recorded on the land test area is reproduced”, paragraph 0044: “defocus value DFrl(i”).

In regard to claim 2, Minechika et al. disclose that the first servo position adjustment step and the second servo position adjustment step are steps of adjusting a servo position on the basis of different evaluation indices (note “DFte” and “DFrl(i”).

In regard to claim 3, Minechika et al. disclose that the first servo position adjustment step is a step of adjusting a servo position so as to optimize an evaluation index with respect to tracking error (note “DFte”).

In regard to claim 4, Minechika et al. disclose that the second servo position adjustment step is a step of adjusting a servo position so as to optimize an evaluation index with respect to a reproduction signal (note “DFrl(i”) in a predetermined reproduction signal processing method.

In regard to claim 6, Minechika et al. disclose that at least one of adjustments of focal position (paragraphs 0040 & 0044: “optimal defocus value”), lens tilt position, and spherical

aberration position is performed in the first servo position adjustment step or the second servo position adjustment step.

In regard to claim 7, Minechika et al. disclose that recording conditions (paragraph 0043: “laser power”) in the recording step are determined by test recording (paragraph 0043: “test writing”).

In regard to claim 8, Minechika et al. disclose that the recording conditions include conditions for pulse position and/or laser irradiation power (paragraph 0043: “laser power”) in recording the predetermined signal.

Claim 9 has similar limitations as claim 1; thus, it is rejected on the same grounds.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minechika et al. in view of Nakajima et al. (US 2003/0067998).

For a description of Minechika et al., see the rejection above. However, Minechika et al. do not disclose: in regard to claim 5, that the second servo position adjustment step is a step of adjusting a servo position so as to minimize a PRML error index M.

Nakajima et al. disclose: in regard to claim 5, adjusting a servo position so as to minimize a PRML error index (paragraph 0182: “the focus offset searcher 291 may output a value corresponding to the smallest PRML error index”).

It would have been obvious to one of ordinary skill in the art at the time of invention to have applied this teaching of Nakajima et al. to the method of Minechika et al., the motivation being to minimize error rate (see paragraph 0182), thereby optimizing servo control (see paragraph 0183).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Toda et al. (US 7,227,818) disclose a recording/reproducing method including a first trial writing operation in which trial writing data are recorded into the recording medium while changing the recording power conditions, the recorded trial writing data are reproduced, and the reproduced trial writing data are evaluated to set an optimum recording power; and a second trial writing operation in which trial writing data are recorded into the recording medium while changing the servo conditions, the recorded trial writing data are reproduced, and the reproduced trial writing data are evaluated to set optimum servo conditions.

Yamazaki et al. (US 6,438,078) disclose an optical disc method comprising conducting focus control based on a focus error signal, and determining an optimum offset value of the focus error signal, test-writing in the inner and outer peripheries of a recordable area, and adjusting the amplitude of a reproduced signal from the outer periphery of the recordable area.

Takeda (US 6,731,573) discloses an optical disk device wherein a predetermined focus offset is adjusted based on the change in the signal quality so that the focus offset is set at an optimal value.

Yamanaka et al. (US 7,355,957) disclose an optical disc medium wherein a data recording area has a signal quality evaluation index value (PRSNR) value defined by quality evaluation index in a partial-response maximum-likelihood (PRML) that is not less than fourteen.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Agustin whose telephone number is (571) 272-7567. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Vincent Agustin/
Patent Examiner, Art Unit 2627